

# Clean Air Act and Jobs

More than forty years of experience with the Clean Air Act has shown that America can build its economy and create more jobs while cutting pollution to protect the health of our citizens and our workforce.

Science proves that air pollution reductions improve public health, preventing premature deaths, hospitalizations, and asthma attacks. Economic data suggest that a healthy economy and population go hand in hand. Between 1970 and 2009 total emissions of the six principal air pollutants fell by **63** percent,<sup>1</sup> and private sector jobs and GDP grew by **86** percent and **204** percent respectively.<sup>2</sup>

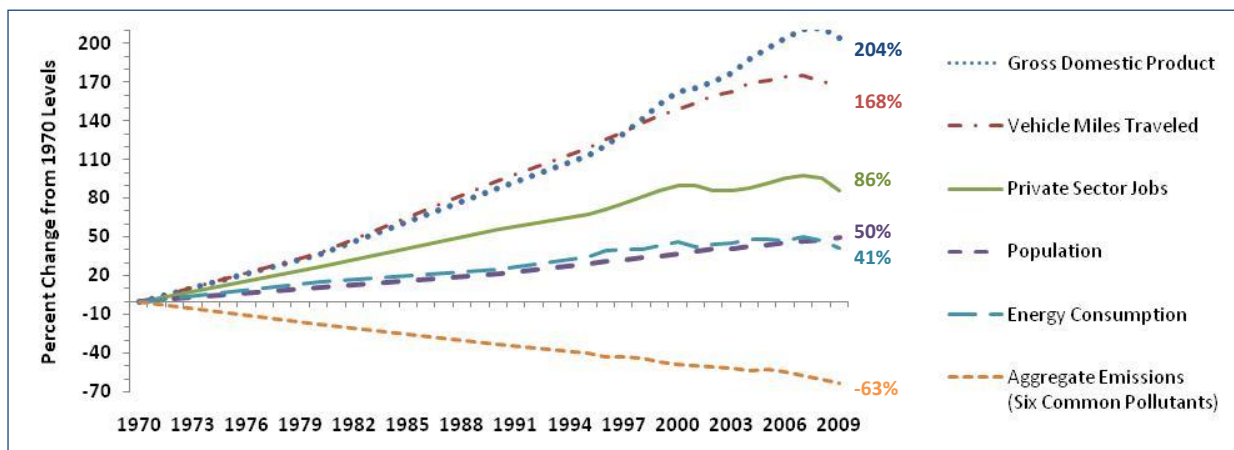


Exhibit 1. Economic growth and emissions reduction, 1970-2009.<sup>2</sup>

## The Clean Air Act Saves Lives and Strengthens the Workforce

- According to a 1997 EPA Report to Congress, the first 20 years of Clean Air Act programs led to the prevention of **205,000** premature deaths, **843,000** asthma attacks, and **18 million** child respiratory illnesses in the year 1990.<sup>3</sup>
- Preliminary EPA analysis shows that the Clean Air Act Amendments of 1990 prevented more than **160,000** premature deaths in 2010 and will prevent an estimated **230,000** deaths in 2020. Businesses and the economy directly benefit from the prevention of **17 million** work days lost in 2020.<sup>3</sup>

<sup>1</sup> <http://epa.gov/airtrends/>

<sup>2</sup> Source: U.S. Department of Commerce, U.S. Department of Transportation, U.S. Department of Labor, U.S. Census, U.S. Energy Information Administration

<sup>3</sup> [http://www.epa.gov/oar/caa/40th\\_highlights.html](http://www.epa.gov/oar/caa/40th_highlights.html)

## Environmental Protection is a Large and Growing Industry

- In 2008, the global environmental protection technology market was approximately **\$782 billion**. The United States is the world's largest producer and consumer of environmental protection technologies worldwide.<sup>4</sup>
- Air pollution control equipment alone generated revenues of **\$18 billion**, including exports of more than **\$3 billion**.<sup>5</sup> Environmental technology exports help the U.S. balance of trade, generating a **\$20 billion** surplus in 2007.<sup>6</sup>
- In the United States, approximately **119,000** companies are engaged in the environmental technology business. In 2008, the U.S. environmental protection technology industry generated approximately **\$300 billion** in revenues, **\$43.8 billion** in exports, and supported close to **1.7 million** jobs.<sup>4</sup>

## The CAA Creates and Supports U.S. Jobs

- When the economy is not at full employment, as is the case in today's economy, environmental standards can have a net positive economic and employment impact by spurring demand for pollution control investments and creating additional demand for workers.
- A study by Resources for the Future examined how industries respond to environmental standards. They found that on average, employment goes up in firms required to meet standards.<sup>7</sup>
- In addition to the increase in employment in the environmental protection industry, environmental standards also create employment in industries that provide intermediate goods to the environmental protection industry. A capital expenditure to reduce air pollution involves the purchase of abatement equipment. The equipment manufacturers, in turn, order steel, tanks, vessels, blowers, pumps, and chemicals to manufacture and install the equipment.

### Improved Environmental and Economic Performance in the Petroleum Refining Industry

A comparison of petroleum refineries in Texas and Louisiana versus those that are more heavily regulated in southern California found better productivity in California and no evidence of job losses related to environmental regulation.

The same study found that petroleum refining productivity in southern California rose sharply during the period when several locally-imposed environmental regulations came into compliance, at the same time as productivity was *falling* elsewhere in the country, suggesting that "pollution control expenditures may have enhanced productivity."

Source: *Environmental Regulation and Productivity: Evidence from Oil Refineries* Eli Berman and Linda T.M. Bui, September 1998, revised May 1999, <http://dss.ucsd.edu/~elib/prod618a.pdf>

<sup>4</sup> International Trade Administration, US Department of Commerce, 2008: <http://web.ita.doc.gov/ete/eteinfo.nsf/068f3801d047f26e85256883006ffa54/4878b7e2fc08ac6d85256883006c452c?OpenDocument>

<sup>5</sup> Industry Facts. U.S. Department of Commerce, April 2010.

<sup>6</sup> IBID

<sup>7</sup> Jobs Versus the Environment: An Industry-Level Perspective. Richard D. Morgenstern, William A. Pizer, and Jhih-Shyang Shih, *Journal of Environmental Economics and Management*. May 2002, Vol. 43, no. 3, pp. 412-436.

- Taken together, regulations increase employment. A 2008 study found that spending on environmental protection can be powerful in stimulating economic activity. They find that “environmental protection, economic growth, and jobs creation are complementary and compatible: Investments in environmental protection create jobs and displace jobs, but the net effect on employment is positive.”<sup>8</sup>
- The Clean Air Interstate Rule alone has resulted in **200,000** jobs over the past seven years due to the installation of control technologies at power plants.<sup>9</sup>

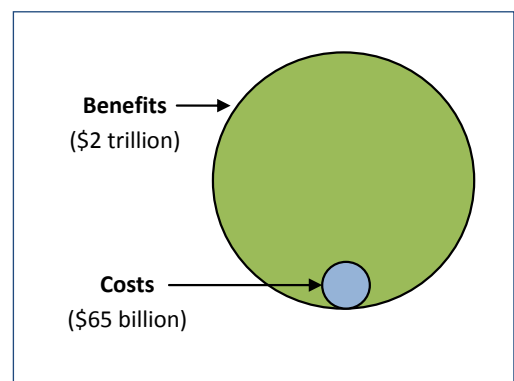
### Environmental Costs are a Small Percentage of Revenue

- A 2005 Census Bureau survey of industry determined that all pollution abatement expenditures, operating and capital totaled **\$26.6 billion** while the firms shipped out goods valued at **\$4.74 trillion**. This means that all pollution controls, not just those related to clean air, were less than **0.6 percent** of total revenue for manufacturing firms. Air pollution control is responsible for less than half of these costs.<sup>10</sup>

## The Clean Air Act is a Good Return on Investment

Due to the enormous benefits, the Clean Air Act is a worthwhile investment to ensure a healthy future for America.

- The direct economic benefits from the 1990 Clean Air Act Amendments are estimated to reach almost **\$2 trillion** for the year 2020, a figure that dwarfs the direct **\$65 billion** cost of implementation.
- About **85 percent** of the benefits are attributable to reductions in premature mortality due to ambient particulate matter. The remaining benefits come from improved health (preventing bronchitis, asthma, lost work days, etc.) and improving the quality of ecological resources. In 2020, the **\$67 billion** economic benefit of improved visibility alone exceeds the entire **\$65 billion** estimated cost of the 1990 Clean Air Act compliance for that year.<sup>11</sup>



**Exhibit 2. Direct benefits and costs of the 1990 Clean Air Act Amendments.**

<sup>8</sup> Environmental protection, the economy, and jobs: National and regional analyses. Roger H. Bezdek, Robert M. Wendling and Paula DiPerna, *Journal of Environmental Management* Volume 86, Issue 1, January 2008, Pages 63-79.

<sup>9</sup> Institute for Clean Air Companies: [http://www.icac.com/files/public/ICAC\\_Carper\\_Response\\_110310.pdf](http://www.icac.com/files/public/ICAC_Carper_Response_110310.pdf)

<sup>10</sup> <http://www.census.gov/prod/2008pubs/ma200-05.pdf>

<sup>11</sup> [http://www.epa.gov/oar/caa/40th\\_highlights.html](http://www.epa.gov/oar/caa/40th_highlights.html)